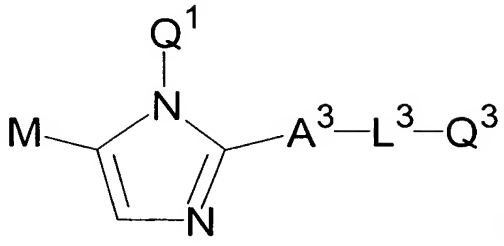
**WHAT IS CLAIMED:**

1. A compound of the formula (I):



(I),

wherein:

$Q^1$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl and $C_{2-7}$ alkenyl;

wherein $Q^1$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{11}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino, $R^{11}HN$-, $R^{11}R^{12}N$-, amido, $R^{11}HNC(O)$, $R^{11}R^{12}NC(O)$ and $R^{11}OC(O)$, and

wherein $R^{11}$ and $R^{12}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

M is a moiety of the formula $-CH_2R^M$, $-CHOHR^M$, $-C(=O)R^M$ or $-C(=N\text{-}OH)R^M$,

wherein, $R^M$ is selected from the group consisting of $C_{1-7}$ alkyl, $R^{M1}HN$-, $R^{M1}R^{M2}N$-, $C_{5-7}$ cycloalkyl, aryl, biaryl and 4-7 membered heterocyclyl containing between 1 and 2 heteroatoms,

wherein $R^M$ may be substituted with one or more substituents independently selected from the group consisting of halo, cyano, hydroxy, $OR^{M1}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino $R^{M1}HN$-, $R^{M1}R^{M2}N$-, amido, $R^{M1}HNC(O)$ and $R^{M1}R^{M2}NC(O)$, and

wherein $R^{M1}$ and $R^{M2}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

or M is hydrogen;

$A^3$ is NH, $NR^3$, sulfur, sulfoxide, sulfone or oxygen, wherein $R^3$ is $C_{1-5}$ alkyl;

$L^3$ is $C_{1-7}$ alkyl or $C_{2-7}$ alkenyl;

wherein $L^3$ may be substituted with one or more substituents selected from the group consisting of halo, hydroxy, methoxy and amino;

or $L^3$ is absent; and

$Q^3$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl, $C_{2-7}$ alkenyl, $C_{3-7}$ cycloalkyl, $C_{5-7}$ cycloalkenyl, aryl, 4-7 membered heterocyclyl, $C_{3-7}$ cycloalkyl- 4-7 membered heterocyclyl, 4-7 membered heterocyclyl- $C_{3-7}$ cycloalkyl, bi-(4-7 membered heterocyclyl), $R^{31}HN$-, $R^{31}R^{32}N$-, azinoyl, $C_{3-7}$ cycloalkylamino, 4-7 membered heterocyclylamino, aryl $C_{1-6}$ alkylamino, $C_{3-7}$ cycloalkylsulfanyl, 4-7 membered heterocyclylsulfanyl and 4-7 membered heterocyclyloxy;

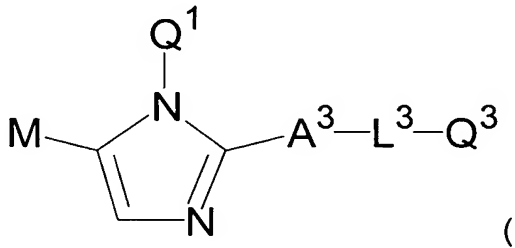
wherein $Q^3$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{31}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino, $R^{31}HN$-, $R^{31}R^{32}N$-, amido, $R^{31}HNC(O)$, $R^{31}R^{32}NC(O)$, $R^{31}OC(O)$, $C_{3-7}$ cycloalkyl, monocyclic 4-7 membered heterocyclyl and monocyclic 4-7 membered heterocyclylalkyl, and

wherein $R^{31}$ and $R^{32}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

or $A^3$ and $L^3$ are absent and $Q^3$ is sulfanyl;

or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

2. A compound of claim 1 of the formula (I):



(I),

wherein:

$Q^1$ is $C_{1-3}$ alkyl

wherein $Q^1$ may be substituted with one substituent selected from the group consisting of amino, $R^{11}HN$-, $R^{11}R^{12}N$-, amido, $R^{11}HNC(O)$, $R^{11}R^{12}NC(O)$ and $R^{11}OC(O)$, and

wherein $R^{11}$ and $R^{12}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

M is a moiety of the formula $-CH_2R^M$, $-CHOHR^M$, or $-C(=O)R^M$ ,

wherein, $R^M$ is selected from the group consisting of $C_{1-3}$ alkyl, $R^{M1}HN$-, $C_{1-3}$ $R^{M1}R^{M2}N$-, $C_{5-7}$ cycloalkyl, aryl, biaryl and 4-7 membered heterocyclyl containing between 1 and 2 heteroatoms,

wherein $R^M$ may be substituted with one or more substituents independently selected from the group consisting of halo, cyano, hydroxy, $OR^{M1}$, $C_{1-5}$ alkyl, nitro, and amino; and

$A^3$ is sulfur or oxygen

$L^3$ is $C_{1-7}$ alkyl or $C_{2-7}$ alkenyl;

wherein $L^3$ may be substituted with one or more substituents selected from the group consisting of halo, hydroxy, methoxy and amino ($H_2N$-);

or $L^3$ is absent; and

$Q^3$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl, $C_{2-7}$ alkenyl, $C_{3-7}$ cycloalkyl, $C_{5-7}$ cycloalkenyl, aryl, 4-7 membered heterocyclyl, $C_{3-7}$ cycloalkyl- 4-7 membered heterocyclyl, 4-7 membered heterocyclyl- $C_{3-7}$ cycloalkyl, bi-(4-7 membered heterocyclyl), $R^{31}HN$-, $R^{31}R^{32}N$-, azinoyl, $C_{3-7}$ cycloalkylamino, 4-7 membered heterocyclylamino, aryl $C_{1-6}$ alkylamino, $C_{3-7}$ cycloalkylsulfanyl, 4-7 membered heterocyclylsulfanyl and 4-7 membered heterocyclyloxy;

wherein $Q^3$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{31}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino, $R^{31}HN$-, $R^{31}R^{32}N$-, amido, $R^{31}HNC(O)$, $R^{31}R^{32}NC(O)$, $R^{31}OC(O)$, $C_{3-7}$ cycloalkyl, monocyclic 4-7 membered heterocyclyl and monocyclic 4-7 membered heterocyclylalkyl, and

wherein $R^{31}$ and $R^{32}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

or $A^3$ and $L^3$ are absent and $Q^3$ is sulfanyl;

or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

3. The compound of claim 1 wherein $Q^1$ is unsubstituted $C_{1-3}$ alkyl.

4. The compound of claim 1 wherein $Q^1$ is methyl.

5. The compound of claim 1 wherein M is a moiety of the formula $-CH_2R^M$, $-CHOHR^M$, $-C(=O)R^M$ or $-C(=N-OH)R^M$.

6. The compound of claim 1 wherein M is $-CHOHR^M$.

7. The compound of claim 1 wherein M is $-C(=O)R^M$.

8. The compound of claim 1 wherein $R^M$ is unsubstituted or substituted $C_{3-7}$ cycloalkyl, aryl or 4-7 membered heterocyclyl.

9. The compound of claim 1 wherein $R^M$ is aryl unsubstituted or substituted with halo, cyano, hydroxy, methoxy, $C_{1-3}$ alkyl, perhalomethyl, nitro, or amino.

10. The compound of claim 1 wherein $R^M$ is phenyl unsubstituted or substituted with F, Cl, Br, cyano, methoxy, $C_{1-3}$ alkyl, $CF_3$, hydroxy, or nitro.

11. The compound of claim 1 wherein $A^3$ is oxygen, sulfur or NH.

12. The compound of claim 1 wherein $A^3$ is oxygen.

13. The compound of claim 1 wherein $A^3$ is sulfur.

14. The compound of claim 1 wherein $L^3$ is unsubstituted or substituted $C_{1-5}$ alkyl or $C_{2-5}$ alkenyl.

15. The compound of claim 1 wherein $L^3$ is selected from (a) $C_{1-3}$ alkyl, which may be unsubstituted or substituted, and independently may be unbranched or branched, and (b) $C_{4-5}$ alkyl, which is branched or substituted, or both.

16. The compound of claim 1 wherein $L^3$ is absent.

17. The compound of claim 1 wherein $Q^3$ is $R^{31}HN$- or $R^{31}R^{32}N$-, or an unsubstituted or substituted nitrogen-containing 4-7 membered heterocyclyl, $C_{3-7}$ cycloalkyl- 4-7 membered heterocyclyl, 4-7 membered heterocyclyl-$C_{3-7}$ cycloalkyl or bi-(4-7 membered heterocyclyl).

18. The compound of claim 1 wherein $Q^3$ is an unsubstituted or substituted, nitrogen-containing, 5-6 membered heterocyclyl.

19. The compound of claim 1 wherein $Q^3$ is $R^{31}R^{32}N$-.

20. The compound of claim 1 wherein: $Q^1$ is methyl; M is a moiety of the formula $-CH_2R^M$, $-CHOHR^M$, $-C(=O)R^M$ or $-C(=N-OH)R^M$; $R^M$ is phenyl unsubstituted or substituted with F, Cl, Br, cyano, methoxy, $C_{1-3}$ alkyl, $CF_3$, hydroxy, or nitro; $A^3$ is oxygen or sulfur; $L^3$ is selected from (a) $C_{1-3}$ alkyl, which may be unsubstituted or substituted, and independently may be unbranched or branched, and (b) $C_{4-5}$ alkyl, which is branched or substituted, or both; and $Q^3$ is $R^{31}R^{32}N$-.

21. The compound of claim 1 wherein: $Q^1$ is methyl; M is a moiety of the formula $-CH_2R^M$, $-CHOHR^M$ or $-C(=O)R^M$; $R^M$ is phenyl unsubstituted or substituted with F, Cl, Br, cyano, methoxy, $C_{1-3}$ alkyl, $CF_3$, hydroxy, or nitro; $A^3$ is oxygen or sulfur; $L^3$ is unsubstituted or substituted $C_{1-5}$ alkyl or $C_{2-5}$ alkenyl,

or $L^3$ is absent; and $Q^3$ is an unsubstituted or substituted, nitrogen-containing, 5-6 membered heterocyclyl.

22. A compound of claim 1 selected from the group consisting of:

(2-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Bromophenyl)-[2-(3-dimethylamino-propylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-{3-methyl-2-[2-(1-methylpyrrolidin-2-yl)-ethylsulfanyl]-3*H*-imidazol-4-yl}-methanone;

(4-Fluorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(3-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[3-methyl-2-(3-piperidin-1-yl-propylsulfanyl)-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[2-(3-dimethylamino-propylsulfanyl)
-3-methyl-3*H*-imidazol-4-yl]-methanone oxime;

(4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

[2-(3-Dimethylamino-propylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-phenyl-methanone;

(3,5-Dichlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

[2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-trifluoromethyl-phenyl)-methanone;

[2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-nitro-phenyl)-methanone;

(4-Bromophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Bromophenyl)-[2-(1-ethyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[3-methyl-2-(1-methyl-piperidin-4-ylsulfanyl)-3*H*-imidazol-4-yl]-methanone;

(4-Bromophenyl)-[3-methyl-2-(3-piperidin-1-yl-propylsulfanyl)-3*H*-imidazol-4-yl methanone;

4-{Hydroxy-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methyl}-benzonitrile; and

(4-Bromophenyl)-[2-(1-*sec*-butyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

23. A compound of claim 1 selected from the group consisting of:

(2-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Bromophenyl)-[2-(3-dimethylamino-propylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-{3-methyl-2-[2-(1-methylpyrrolidin-2-yl)-ethylsulfanyl]-3*H*-imidazol-4-yl}-methanone;

(4-Fluorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(3-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[3-methyl-2-(3-piperidin-1-yl-propylsulfanyl)-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[2-(3-dimethylamino-propylsulfanyl)
-3-methyl-3*H*-imidazol-4-yl]-methanone oxime;

(4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

[2-(3-Dimethylamino-propylsulfanyl)-3-methyl-3*H*-imidazol-4-yl]-phenyl-methanone;

(3,5-Dichlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

[2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-trifluoromethyl-phenyl)-methanone;

[2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-nitro-phenyl)-methanone; and

(4-Bromophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

24. A compound of claim 1 selected from the group consisting of:

(4-Fluorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone;

(4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone; and

[2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-nitro-phenyl)-methanone;

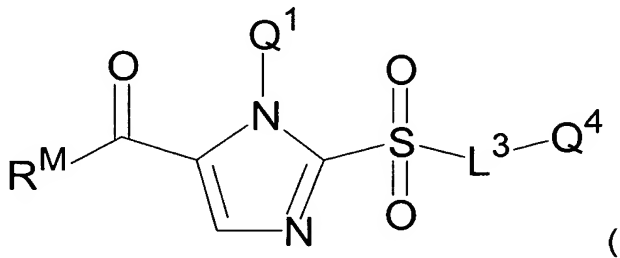
or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

25. The compound of claim 1 having the formula (4-Chlorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

26. The compound of claim 1 having the formula (4-Fluorophenyl)-[2-(1-isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-methanone or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

27. The compound of claim 1 having the formula [2-(1-Isopropyl-piperidin-4-ylmethoxy)-3-methyl-3*H*-imidazol-4-yl]-(4-nitro-phenyl)-methanone or a pharmaceutically acceptable ester, ether, *N*-oxide, amide, salt, hydrate or isotopically labeled form thereof.

28. A compound of claim 1 of the formula (II):



(II)

wherein:

$Q^1$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl and $C_{2-7}$ alkenyl;

wherein $Q^1$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{11}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino ($H_2N$-), $R^{11}HN$-, $R^{11}R^{12}N$-, amido ($H_2NC(O)$), $R^{11}HNC(O)$, $R^{11}R^{12}NC(O)$ and $R^{11}OC(O)$, and

wherein $R^{11}$ and $R^{12}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

$R^M$ is selected from the group consisting of $C_{1-7}$ alkyl, $R^{M1}HN$-, $R^{M1}R^{M2}N$-, $C_{3-7}$ cycloalkyl, aryl, biaryl and 4-7 membered heterocyclyl,

wherein $R^M$ may be substituted with one or more substituents independently selected from the group consisting of halo, cyano, hydroxy, $OR^{M1}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino ($H_2N$-), $R^{M1}HN$-, $R^{M1}R^{M2}N$-, amido ($H_2NC(O)$), $R^{M1}HNC(O)$ and $R^{M1}R^{M2}NC(O)$, and

wherein $R^{M1}$ and $R^{M2}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

$L^3$ is $C_{1-7}$ alkyl or $C_{2-7}$ alkenyl;

wherein $L^3$ may be substituted with one or more substituents selected from the group consisting of halo, hydroxy, methoxy and amino ($H_2N$-);

or $L^3$ is absent; and

$Q^4$ is hydrogen;

or a derivative thereof that bears one or more protecting groups.

29. A compound of claim 28, wherein $Q^1$ is unsubstituted $C_{1-3}$ alkyl.

30. A compound of claim 28, wherein $Q^1$ is methyl.

31. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a compound of claim 1, 20, 21, or 24.

32. A Method of inhibiting histamine $H_3$ receptor activity in a subject, comprising administering an effective amount of a compound of claim 1, 21, or 24 to a subject in need of such inhibition of histamine $H_3$ receptor activity.

33. A method of treating a subject having a disease or condition modulated by histamine $H_3$ receptor activity, comprising administering to the subject a therapeutically effective amount of a compound of claim 1, 21, or 24.

34. A method of claim 33, wherein said disease or condition is selected from the group consisting of sleep/wake disorders, arousal/vigilance disorders, migraine, asthma, dementia, mild cognitive impairment (pre-dementia), Alzheimer's disease, epilepsy, narcolepsy, eating disorders, motion sickness, vertigo, attention deficit hyperactivity disorders, learning disorders, memory retention disorders, schizophrenia, and upper airway allergic response.

35. A method for treating a disease or condition modulated by at least one receptor selected from the histamine $H_1$ receptor and the histamine $H_3$ receptor, said method comprising (a) administering to a subject a histamine

$H_1$ receptor antagonist compound, and (b) administering to the subject a compound of claim 1, said method providing a therapeutically effective amount of said compounds.

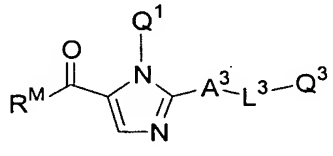
36. The method of claim 35 wherein the histamine $H_1$ receptor antagonist and the compound of claim 1 are present in the same dosage form.

37. A method for treating diseases or conditions modulated by at least one receptor selected from the histamine $H_2$ receptor and the histamine $H_3$ receptor in a subject, comprising (a) administering to the subject a histamine $H_2$ receptor antagonist compound, and (b) administering to the subject a compound of claim 1, said method providing a therapeutically effective amount of said compounds.

38. The method of claim 37 wherein the histamine $H_2$ receptor antagonist and the compound of claim 1 are present in the same dosage form.

39. A method for studying disorders mediated by the histamine $H_3$ receptor, comprising using an $^{18}F$-labeled compound of claim 1 or 23 as a positron emission tomography molecular probe.

40. A process for the production of a compound of the formula (11):



(11)

wherein:

$Q^1$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl and $C_{2-7}$ alkenyl;

wherein $Q^1$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{11}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino ($H_2N$-), $R^{11}HN$-,

$R^{11}R^{12}N$-, amido ($H_2NC(O)$), $R^{11}HNC(O)$, $R^{11}R^{12}NC(O)$ and $R^{11}OC(O)$, and

wherein $R^{11}$ and $R^{12}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

$R^M$ is selected from the group consisting of $C_{1-7}$ alkyl, $R^{M1}HN$- $R^{M1}R^{M2}N$-, $C_{3-7}$ cycloalkyl, aryl, biaryl and 4-7 membered heterocyclyl,

wherein $R^M$ may be substituted with one or more substituents independently selected from the group consisting of halo, cyano, hydroxy, $OR^{M1}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino ($H_2N$-), $R^{M1}HN$-, $R^{M1}R^{M2}N$-, amido ($H_2NC(O)$), $R^{M1}HNC(O)$ and $R^{M1}R^{M2}NC(O)$, and

wherein $R^{M1}$ and $R^{M2}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

$A^3$ is NH, $NR^3$, sulfur or oxygen, wherein $R^3$ is $C_{1-5}$ alkyl;

$L^3$ is $C_{1-7}$ alkyl or $C_{2-7}$ alkenyl;

wherein $L^3$ may be substituted with one or more substituents selected from the group consisting of halo, hydroxy, methoxy and amino ($H_2N$-);

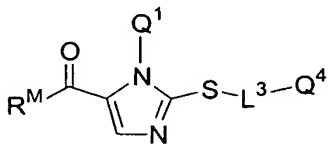
or $L^3$ is absent; and

$Q^3$ is selected from the group consisting of $C_{1-7}$ alkyl, $C_{1-7}$ haloalkyl, $C_{2-7}$ alkenyl, $C_{3-7}$ cycloalkyl, $C_{5-7}$ cycloalkenyl, aryl, 4-7 membered heterocyclyl, $C_{3-7}$ cycloalkyl- 4-7 membered heterocyclyl, 4-7 membered heterocyclyl- $C_{3-7}$ cycloalkyl, bi-(4-7 membered heterocyclyl), $R^{31}HN$-, $R^{31}R^{32}N$-, azinoyl ($R^{31}HN^+(O^-)$ or $R^{31}R^{32}N^+(O^-)$), $C_{3-7}$ cycloalkylamino, 4-7 membered heterocyclylamino, aryl $C_{1-6}$ alkylamino, $C_{3-7}$ cycloalkylsulfanyl, 4-7 mebered heterocyclylsulfanyl and 4-7 membered heterocyclyloxy;

wherein $Q^3$ may be substituted with one or more substituents selected from the group consisting of halo, cyano, hydroxy, $OR^{31}$, $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl, $C_{2-5}$ alkenyl, nitro, amino ($H_2N$-), $R^{31}HN$-, $R^{31}R^{32}N$-, amido ($H_2NC(O)$), $R^{31}HNC(O)$, $R^{31}R^{32}NC(O)$,

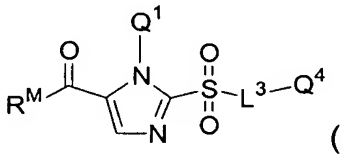
$R^{31}OC(O)$, $C_{3-7}$ cycloalkyl, monocyclic 4-7 membered heterocyclyl and monocyclic 4-7 membered heterocyclyl- $C_{1-6}$ alkyl, and wherein $R^{31}$ and $R^{32}$ are independently $C_{1-5}$ alkyl, $C_{1-5}$ haloalkyl or $C_{2-5}$ alkenyl;

that comprises treating a compound of the formula (5b)



(5b)

wherein $Q^4$ is hydrogen, with an oxidizing agent resulting in an intermediate compound of the formula (10)



(10)

and treating said intermediate compound (10) with a reagent H-$A^3$-$L^3$-$Q^3$, wherein $L^3$ of the reagent H-$A^3$-$L^3$-$Q^3$ is independent of $L^3$ of formula (5b) and formula (10), in the presence of a base in a suitable solvent yielding said compound of formula 11.

41. A process according to claim 40, wherein said oxidizing agent is either hydrogen peroxide in acetic acid, or 3-chloroperoxybenzoic acid in dichloromethane or diethyl ether.

42. A process according to claim 40, wherein said base is an alkali metal hydride.

43. A process according to claim 42, wherein said alkali metal hydride is sodium hydride.

44. A process according to claim 50, wherein said suitable solvent is a member selected from the group consisting of dimethylformamide, benzene, 1,2-dimethoxyethane and tetrahydrofuran.

45. A process according to claim 54, wherein said suitable solvent is tetrahydrofuran.